

CLAIMS

1. Cosmetic and/or pharmaceutical active components obtainable by fermenting plant constituents and/or plant extracts.
2. A process for the production of cosmetic and/or pharmaceutical
5 active components, in which plant constituents and/or plant extracts are fermented
3. A process as claimed in claim 2, characterized in that
 - (a) plant constituents and/or plant extracts are size-reduced and/or
10 pressed and/or extracted and processed to a fermentation broth,
 - (b) the fermentation broth is optionally pasteurized or sterilized,
 - (c) the fermentation broth thus prepared is inoculated with the microorganisms,
 - (d) the fermentation broth thus inoculated is fermented and, optionally,
 - 15 (e) on completion of fermentation, the fermentation broth is worked up and the active components removed.
4. A process as claimed in claims 2 and/or 3, characterized in that plant constituents and/or plant extracts selected from the group of plants
20 consisting of potatoes, rice, soya, wheat, barley, oats, rye, buckwheat, beans, peas, linseeds, cotton, sesame, lupins, rape, hemp, coconut palm, sunflowers, lucerne, hibiscus, maca, quinoa, almond, moringa, silk, baobab, cassia, irvingia, thistle and oil palm are fermented.
5. A process as claimed in at least one of claims 2 to 4, characterized
25 in that vegetable starting materials selected from the group consisting of seeds, nodules, roots, leaves, fruits in size-reduced and/or pressed and/or extracted form and protein concentrates, hydrolyzates or isolates are used as the plant constituents.
6. A process as claimed in any of claims 2 to 5, characterized in that an
30 extraction is carried out in the mildly alkaline range.

7. A process as claimed in at least one of claims 2 to 6, characterized in that the fermentation broths are adjusted to a pH of 4.5 to 8.5.
8. A process as claimed in at least one of claims 2 to 7, characterized in that the pasteurization or sterilization is carried out at a temperature of
5 60 to 135°C.
9. A process as claimed in at least one of claims 2 to 8, characterized in that the pasteurization or sterilization is carried out over a period of 1 to 30 minutes.
10. A process as claimed in at least one of claims 2 to 9, characterized in that the fermentation is carried out in the presence of a mixture of
10 various microorganisms.
11. A process as claimed in claim 10, characterized in that mixtures of various microorganisms containing at least one representative from the group consisting of *Lactobacillus*, *Lactococcus* and *Leuconostoc* are used.
12. A process as claimed in claims 9 and/or 11, characterized in that
15 mixtures of various microorganisms containing at least one yeast are used.
13. A process as claimed in any of claims 9 to 12, characterized in that the microorganisms used are selected from the group consisting of *Lactobacillus acidophilus*, *Lactobacillus brevis*, *Lactobacillus casei*,
20 *Lactobacillus caucasicus*, *Lactobacillus cellobiosus*, *Lactobacillus delbruecki*, *Lactobacillus helveticus*, *Lactobacillus hilgardii*, *Lactobacillus kefir*, *Lactobacillus kefirianofaciens*, *Lactobacillus kefirgranum*, *Lactobacillus parakefir*, *Lactobacillus plantarum*, *Lactococcus lactis* subsp. *cremoris*, *Lactococcus lactis* subsp. *diacetylactis*, *Lactococcus lactis* subsp. *lactis*, *Lactococcus plantarum*, *Leuconostoc citreum*, *Leuconostoc citroverum*, *Leuconostoc dextranicum*, *Leuconostoc kefir*, *Leuconostoc mesenteroides*, *Leuconostoc pseudomesenteroides*, *Candida kefir*, *Candida tenuis*, *Kluyveromyces bulgaricus*, *Kluyveromyces fragilis*, *Kluyveromyces lactis*, *Saccharomyces carbajali*, *Saccharomyces carlbergensis*, *Sacharomyces cerevisiae*, *Saccharomyces delbrueckii*,
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Saccharomyces florentinus, Saccharomyces globosus, Saccharomyces kefir, Saccharomyces marxianus, Saccharomyces, unisporus, Torula homii, Torula kefir, Streptococcus thermophilus, Streptococcus durans, Acetobacter aceti and Acetobacter rasens and mixtures thereof.

- 5 14. A process as claimed in at least one of claims 9 to 13, characterized in that the lactic acid bacteria are used in quantities of 10^2 to 10^8 cfu/ml.
15. A process as claimed in at least one of claims 9 to 14, characterized in that the yeasts are used in quantities of 10^2 to 10^7 cfu/ml.
16. A process as claimed in at least one of claims 2 to 15, characterized
10 in that the fermentation is carried out at temperatures of 10 to 47°C.
17. A process as claimed in at least one of claims 2 to 16, characterized in that the fermentation is carried out over a period of 12 to 48 h.
18. A process as claimed in at least one of claims 2 to 17, characterized
15 in that the active components are separated from the fermentation broth by centrifuging, membrane filtration, liquid/liquid extraction, solid phase extraction, chromatography or precipitation from solvents.
19. A process as claimed in at least one of claims 2 to 18, characterized in that the microorganisms still present in the fermentation products are destroyed by heat treatment or removed.
- 20 20. Cosmetic and/or pharmaceutical preparations containing active components as claimed in claim 1.
21. Preparations as claimed in claim 20, characterized in that they contain active components in quantities of 0.01 to 5% by weight, based on the preparation.
- 25 22. The use of active components according to claim 1 for the production of cosmetic or pharmaceutical preparations.
23. The use of active components according to claim 1 for stimulating the growth and survival of fibroblasts.
24. The use of active components according to claim 1 for stimulating
30 the GHS concentration in the cells.

25. The use of active components according to claim 1 as anti-inflammatory agents.
26. The use of active components according to claim 1 for protecting the skin and hair against UVA radiation.
- 5 27. The use of active components according to claim 1 for immunostimulation of the metabolism.
28. The use of active components according to claim 1 for combating wrinkles and for vitalizing and rejuvenating the skin.
29. The use of active components according to claim 1 for strengthening
10 the defence mechanisms of skin and hair follicles against environmental toxins and oxidative stress.
30. The use of active components according to claim 1 for stimulating fibroblasts to form dermal macromolecules.
31. The use of active components according to claim 1 for combating
15 acne vulgaris or seborrhea.
32. The use of active components according to claim 1 as moisture regulators in the skin.
33. The use of active components according to claim 1 for inhibiting collagenases and elastases.
- 20 34. The use of active components according to claim 1 as regulators for melanogenesis in skin and hair.
35. The use of active components according to claim 1 as desliming agents.
36. The use of active components according to claim 1 for protecting
25 skin against ageing.
37. The use of active components according to claim 1 for protection against environmental toxins.
38. The use of active components according to claim 1 for stimulating hair growth.
- 30 39. The use of active components according to claim 1 for the

production of cosmetic agents for sensitive skin.

40. The use of active components according to claim 1, characterized in that the active components are used in the form of microcapsules or nanocapsules.